

350-1100nm Silicon-based Bias Photodetector, Active area $\Phi 3.6\text{mm}$



- **Product Description**

IdealPhotonics' silicon-based bias photodetector has a light-sensitive range of 200nm to 1100nm, with extremely low noise, fast response, no gain, and low cost. It is suitable for general photodetector applications, offering excellent performance and high cost-effectiveness, along with comprehensive technical support. It is commonly used in ultraviolet and visible light measurements.



- **Product features**

Light-sensitive range 200nm-1100nm, commonly used in ultraviolet and visible light measurements. Bias-type detector, with extremely low noise, fast response, and no gain. Low cost, suitable for general photodetector applications. Excellent performance, high cost-effectiveness, and comprehensive technical support. Offer customization services.

- **Part Number**

MP-PD-M-S-25-BC3E36

- **Application area**

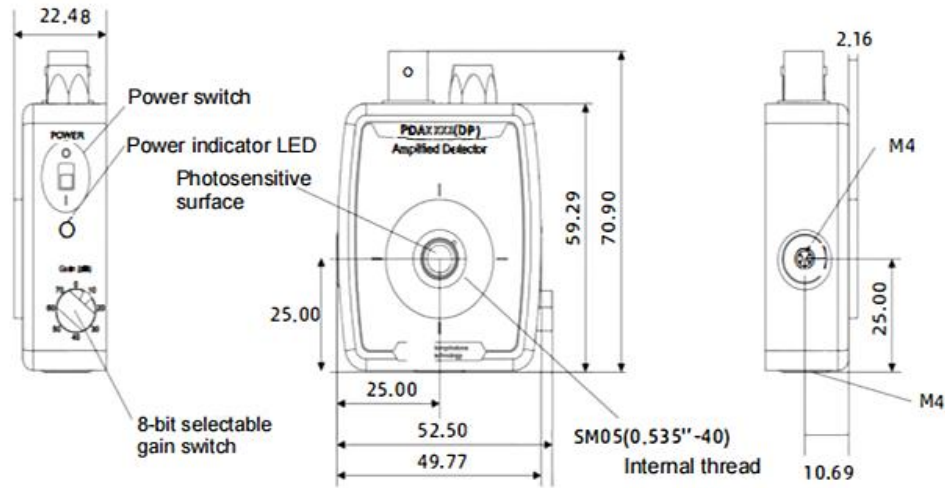
Ultraviolet and visible light measurements.

- **Core parameters**

Wavelength	Active Area	Bandwidth
350-1100nm	Φ3.6mm	25MHz

● Dimension Drawing

Dimension



● General Parameters

Main Parameters

Parameter	Value		
	Wavelength Range	200-1100nm	350-1100nm
Active area	Φ1.0mm	Φ3.6mm	Φ10.0mm
Bandwidth Range	350MHz	25MHz	10MHz
Rise Time (@50Ω)	1ns	14ns	35ns

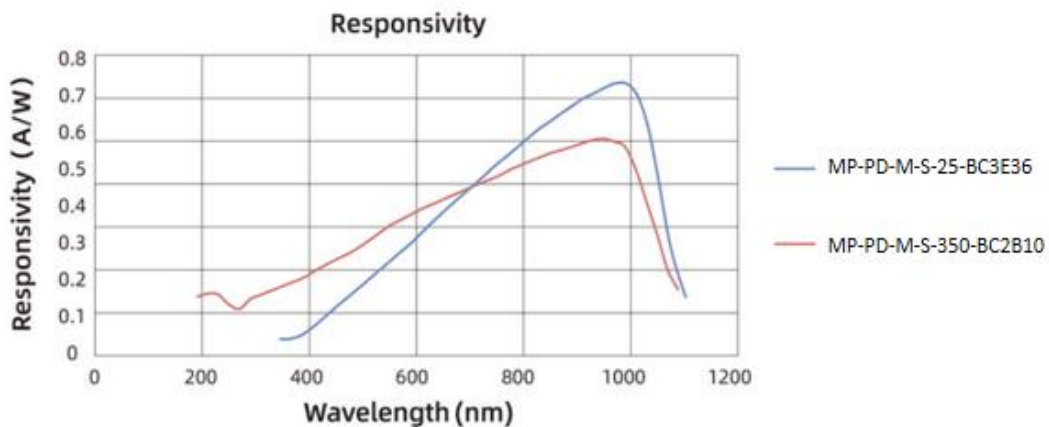


NEP	$5.0 \times 10^{-14} \text{W/Hz}^{1/2}$	$1.6 \times 10^{-14} \text{W/Hz}^{1/2}$	$2.4 \times 10^{-14} \text{W/Hz}^{1/2}$
Dark Current	0.3nA(Typ.)/10 nA(Max)	0.35nA(Typ.)/6.0nA(Max)	0.9nA(Typ.)/10nA(Max)
Junction Capacitance	6pF(Typ.)	40pF(Typ.)	150pF(Typ.)
Bias Voltage	10V		
Output Current	0~10mA		
Output Voltage	~9V(Hi-Z); ~170 mV(50Ω)		
Photosensitive Surface Depth	0.09" (2.2 mm)	0.09" (2.2 mm)	0.13" (3.3mm)
Operating Temperature	10-40°C		
Storage Temperature	-20-70°C		
Detector Net Weight	0.10kg		



Undervoltage Indicator	$V_{out} \leq 9V(Hi-Z)$ $V_{out} \leq 170mV(50\Omega)$				
Dimensions	2.79" X 1.96" X 0.89" (70.9 mm X 49.8 mm X 22.5 mm)				
Power Supply Battery	Power Switch	Signal Interface	Battery Monitoring	Mounting Interface	Optical Interface
A23 , 12VDC , 40mAh	Slide switch	BNC Female	Instant button	M4 X 2	SM1 X 1 SM0.5 X 1

SI Response Curve:





Attachment 1: Optional Configuration Table

Silicon-based Bias Photodetector		Optional Configurations			
Product Name	Material	Type	Features	Wavelength Range Photodetector Size	Optional Configurations
Photodetector	Si Silicon	Amplified	Adjustable Gain	200-1100nm , Φ 1.0mm	
				350-1100nm , Φ 3.6mm	
				320-1100nm , Φ 10.0m	

Attachment 2: Model Cross-reference Table

Model	Specs
MP-PD-M-S-BC2B10	200-1100nm Silicon-based Bias Photodetector, Active area Φ 1.0mm, Rise Time 1ns, Bandwidth 350 MHz



MP-PD-M-S-BC3E36	350-1100nm Silicon-based Bias Photodetector, Active area Φ3.6mm, Rise Time 14ns, Bandwidth 25 MHz
MP-PD-M-S-10-BC3D100	320-1100nm Silicon-based Bias Photodetector, Active area Φ10.0mm, Rise Time 35ns, Bandwidth 10 MHz